

2009 Flood Risk Management RMS Recommendations Status in 2013 Flood Management RMS

2009 Flood Management RMS Recommendations	Status	Link to 2013 Recommendations	Notes
Recommendations Common to All Flood Risk Management Approaches			
1. The Department of Water Resources should lead research into the potential effects of global climate change on precipitation and runoff patterns, and disseminate revised flood projections needed to plan for flood events. Flood management agencies and local governments should incorporate the potential effects of climate change into planning for future flood events.	Completed		Completed. DWR currently does help lead research into the effects of climate change. A Climate Change handbook was created to help local governments incorporate climate change into planning. Ongoing research is being conducted with UC-Davis, USACE, USGS, and NOAA on climate change and its impacts on flood hydrology. This focuses on local extremes instead of average precipitation and temperature changes.
2. Consistent with the governor’s Executive Order S-13-08, the Ocean Protection Council, the Natural Resources Agency, the Department of Water Resources, and the Governor’s Office of Planning and Research, should (1) initiate a statewide climate change adaptation strategy, (2) request the National Academy of Science establish an expert panel to report on sea level rise impacts; (3) issue interim guidance to State agencies for how to plan on sea level rise in designated coastal and floodplain areas; and (4) initiate a report on critical existing and planned infrastructure projects vulnerable to sea level rise.	Partially Completed	Risk Assessment -Climate Change Recommendation (current #27 and 28 in 2013 RMS)	Items 1 through 3 completed. The State Climate Portal does not indicate that Item (4) has been completed. Other approaches may be more appropriate than Item (4). For example, may want to look at California Coastal Commission or the Bay Area Development and Conservation Commission strategies for ideas. BDCC is currently conducting an impacts assessment on sea-level rise through its Adapting to Rising Tides Project that will evaluate impacts on: Airport, Land Use, Contaminated Lands, Energy Infrastructure and Pipelines, Ground Transportation, Hazardous Materials, Nonstructural Shorelines/Natural Areas, Parks and Recreation, Seaport, Stormwater, Structural Shorelines, Wastewater. Need to bring to the Flood Caucus to discuss whether to retain Item (4) as a recommendation or possibly revise recommendation.
3. The Department of Water Resources should, with extensive stakeholder input, describe the current status of the flood management systems in the Sacramento and San Joaquin watersheds and recommend changes throughout the system for those areas currently receiving protection from the State-federal system by January 1, 2012, consistent with the California Water Code (commencing with §9600).	Completed		Completed. Central Valley Flood Protection Plan and all documents incorporated by reference (which includes the Flood Control System Status Report).
4. The Department of Water Resources should, with extensive stakeholder input, prepare a report that identifies the current status of flood protection infrastructure and flood risks statewide and identifies opportunities and needs to improve integrated flood management statewide by January 1, 2012.	In Progress		In progress. Statewide Flood Management Planning Program.
5. The Department of Water Resources should develop incentives and provide support for the creation and maintenance of IRWM plans that address regional flood management issues by January 1, 2012.	Completed		Completed. IRWMP guidelines now incorporate flood management. However, a new recommendation needed to promote better integration between flood management and IRWMP process.
6. The Department of Water Resources should develop a financing strategy to address statewide flood management needs identified in the statewide report on flood management risks by January 1, 2012. The strategy should address both capital costs and operation and maintenance costs.	In Progress		In Progress. This will be achieved in the 2013 California Water Plan
7. DWR should develop a comprehensive statewide database on flood management, and make it accessible to flood management agencies and local governments. The database should include natural floodplain resources, land use and watershed boundaries, and updated flood hazard areas.	Partially Completed	Risk Assessment - Regional flood risk evaluation methods (current #25 and 26 in 2013 RMS)	
8. DWR should map 200-year floodplains throughout the state, make this information available to flood management agencies and local governments, and evaluate the costs and benefits of establishing the 200-year flood as the minimum planning standard for urban and urbanizing areas statewide (Currently the 200-year standard is required only for the Central Valley.)	Not completed (Recommend discussion)	As written 2009 recommendation conflicts with existing Flood Future Report Recommendation Risk Assessment -Regional flood risk reduction goals (current #24 in 2013 RMS)	<p>The 200-year floodplain map in the DWR Best Available Map only includes the Central Valley and was taken from the Comprehensive Study. DWR, through its CVFED program, is creating a 200-year floodplain map for mainstem flooding from the Sacramento and San Joaquin rivers (and major tributaries). But this map will not be sufficient for establishing the 200-year level of protection for urban and urbanizing areas. Urban Levee Design Criteria has been created to establish standards for designing urban levees in the Central Valley. The engineering standards described in the Urban Levee Design Criteria are also available for all other cities and counties outside the Central Valley.</p> <p>The CVFPP promotes a minimum of 200-year level of protection for urban communities protected by facilities of the SPFC. CVFPP states: "Central Valley cities and counties that wish to continue to develop in urban areas are required to achieve an urban level of flood protection 200-year flood), defined in California Government Code Section 65007(l) and California Water Code Section 9602(i). The State supports achieving an urban level of flood protection, at a minimum, for all existing urban and urbanizing areas in the Systemwide Planning Area. Where feasible, the State supports consideration of higher levels of flood protection, particularly for urban/urbanizing areas in deep floodplains (greater than 3 feet of flooding during a 200-year flood). "</p> <p>DWR has not evaluated costs and benefits of a 200-year level of protection requirement statewide. Cost/benefit analysis has limited applicability when accounting for life safety consequences. Recommend revising recommendation to state, at minimum, that DWR promote a high level of protection for existing urban and adjacent urbanizing areas statewide as a condition for further development.</p>
9. The Department of Water Resources should utilize the comments and recommendations in the Flood Risk Management Strategy to inform: 1) the statewide report on opportunities and needs to improve integrated flood management; 2) the Central Valley Flood Protection Plan; and 3) Integrated regional water management planning groups on regional flood management.	Completed		CVFPP completed. SFMP soon completed. IRWM planning groups have already begun incorporating flood management agencies (although integration could be improved)

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Structural Approach Recommendations			
10a. The Legislature should enact legislation which clarifies the liability for structural flood management facilities.	Partially Completed (Recommend discussion)	If focus is changed to roles and responsibilities, then would fit under Agency Alignment Recommendation	Water Code Section 8307 links flood liability with local planning decisions. Cities and counties now share flood liability with the State in the case of litigation over unreasonably approved new development on previously undeveloped areas. Bring forward to Flood Caucus for discussion. Suggest that this recommendation focus more on the delineation of roles and responsibilities instead of liability. Roles and responsibilities should be reviewed based on current needs, instead of historical practice. This would set the stage for corresponding legislative actions.
10b. The Legislature should enact legislation which clarifies “reasonable” impacts on downstream drainage and property.	Not completed	Land Use Recommendation-Develop land use planning principles (current # 17 and 20 in 2013 RMS)	DWR is currently considering a formalized policy for evaluating and mitigating for redirected hydraulic impacts. Legislation is unlikely to be needed or desired.
11. DWR and local flood jurisdictions should establish long-term buyback programs to acquire properties immediately adjacent to levees and other structural facilities to facilitate the eventual removal of these structures, thereby enhancing the potential for setback levees and floodplain restoration where feasible.	Not completed (Recommend discussion)	Reliable Funding Recommendation - Implement Priority Projects	Bring forward to Flood Caucus for discussion to determine if recommendation is still warranted. The CVFPP states that the State will actively engage FEMA to help provide grants to local agencies and citizens for applicable risk mitigation actions, including property acquisition, structure demolition, and relocation; and floodproofing and elevating residential and nonresidential structures. "Buy-back" may not be the appropriate term because many state-federal levees are located on private properties with easement arrangements. Therefore, these facilities were not necessarily on State property in the first place.
12. To facilitate cross-jurisdictional projects and programs, the Governor’s Office of Planning and Research should develop guidelines and model legal agreements (e.g., MOU or Joint Powers Authority) that clearly delineate responsibilities for construction, operation, and maintenance of flood management facilities and programs and address liability issues.	Not completed (Recommend discussion)	If focus is changed to roles and responsibilities, then would fit under Agency Alignment Recommendation	Bring forward to Flood Caucus for discussion. Responsibilities for construction, operation, and maintenance for flood management facilities vary according to site-specific agreements. Suggest revising recommendation to focus on improving governance structures to modernize roles and responsibilities for flood system construction, operations and maintenance. Could recommend more regional governance (JPA or legislated) that is funded by its own financing structure. These regional bodies could possibly receive some state support in return of certain requirements, such as a professional board.
13. Planning for structural projects should be integrated into a comprehensive integrated flood management approach that takes a watershed perspective.	Replaced with new SFMP Recommendation	Regional Planning – Use regional planning to establish priority projects using an IWM approach	Replaced with new SFMP recommendation on same topic. "1. Identify regional flood planning areas - Establish flood management planning regions throughout the state with boundaries that are systemwide, watershed based, and consistent with existing Federal and State agency boundaries including existing IRWM Plan funding areas. "
14. For routine maintenance of structural facilities, DWR should develop recommendations for streamlined environmental review and permitting that result in time and cost savings, while protecting and enhancing sensitive environmental resources.	Replaced with new SFMP Recommendation	Agency Alignment - Establish Regional working Groups (Current #2 in 2013 RMS)	Replaced with new SFMP recommendation on same topic. "2. Establish regional working groups to achieve streamlined permitting, planning, and implementation of flood projects..." For further background, DWR has a Small Erosion Repair Program , which provides a streamlined process for DWR to identify, obtain regulatory authorization for, and construct small levee repairs on levees maintained by DWR within the Sacramento River Flood Control Project area. This program is coordinated with the Interagency Flood Management Collaborative Program Group. DWR is also investigating Regional Permitting as part of the Conservation Strategy.
Land Use Management Recommendations			
15. The Department of Water Resources should continue to work with the Federal Emergency Management Agency to expedite the review and update of flood insurance rate maps and expand ongoing efforts to enhance public understanding of potential flood risks.	Replaced with new SFMP Recommendation	Flood Risk Awareness -Align existing flood awareness initiatives (current #9 in 2013 RMS)	Original recommendation not applicable for 2013.Replaced with SFMP recommendations. Recommendation 21: "Identify regional flood risks", Recommendation 22. "Assist in identifying regional flood risk reduction goals and corresponding acceptable levels of residual risk throughout the state and Recommendation 23 "23. Identify and support regional flood risk evaluation methods and data to establish project priorities"
16. Local governments should prepare revised general plans and regulations that respond to statutory mandates to address flood risks, and are updated frequently, as hydrologic projections change. As required by Government Code Section 65302, the land use element should identify and annually review floodprone areas identified by FEMA or DWR. The revised General Plans and regulations should reflect an integrated flood management approach and consider future development on tribal lands. DWR and OPR should provide technical assistance to local governments to revise their General Plans and land use regulations.	Partially Completed	Land Use Planning - Develop land use planning principles (current #17 in 2013 RMS)	Revision of general plans is an ongoing, recurring activity. DWR has created a Local Land Use Planning Handbook that helps local agencies understand their requirements.
17. Local land-use agencies should not allow new critical public facilities (such as fire stations, emergency shelters, hospitals or schools) to be constructed within the 200-year floodplain. Existing critical facilities located in flood-prone areas should be noted in the Emergency Plans prepared by local agencies, with evacuation and egress routes clearly identified.	Not completed (Recommend discussion)	Land Use Planning - Develop land use planning principles (current #17 and 19 in 2013 RMS)	Bring forward to Flood Caucus for discussion. This is a local ordinance issue. It may be necessary to define critical infrastructure for clarity. In addition, the recommendation needs to reflect that some existing communities cannot move out of the floodplain and thus all of their critical infrastructure would be in the 200-year floodplain. In these situations, may want to promote additional infrastructure outside the 200-year floodplain that could be used for critical emergencies when the infrastructure within the floodplain is compromised, or inaccessible.

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18. CEQA reviews of development projects in floodplains should use the latest floodplain mapping data available, implement General Plan flood management policies, and ensure that flood risks associated with development projects are fully understood and properly mitigated. The potential impacts of “floodproofing” individual development projects to the risk of upstream and downstream flooding should be evaluated and mitigated if significant.	Not completed (Recommend discussion)	Risk Assessment - Regional flood risk reduction goals (current #24 in 2013 RMS)	Bring forward to Flood Caucus for discussion. No redirected hydraulic impacts has been a widely accepted practice. CEQA currently requires 100-year level of protection. CEQA may need to be revised to be consistent with standards/requirements for higher levels of protection.
19. DWR (as required by Water Code Section 9130) and local agencies should analyze potential flood risks, including residual flood risks to property within levee protection zones, and make this information publicly available, including residual flood risks. The public, businesses, tribal governments, and public agencies should be provided with sufficient information about potential flood risks to make informed decisions that can reduce potential impacts of flooding.	Partially Completed	Risk Assessment - Regional flood risk reduction goals (current #24 in 2013 RMS)	Completed for SPFC facilities only. Levee Flood Protection Zone maps are posted online. However, levee flood protection zone maps have not been created statewide.
20. The State should explore additional funding options for local government preparation of revised General Plans and land use regulations that address flood risks, and for floodplain function restoration projects. State funding for floodplain function restoration projects should be prioritized based on the magnitude of flood risks that would be avoided, and the magnitude of ecosystem and water resources benefits that would be created.	Not completed (Recommend discussion)	Reliable Funding - Implement priority flood projects (current # 4 and 8 in 2013 RMS)	This recommendation should be moved to the Finance Plan. Recommend not mixing the concepts of revisions to General Plans and funding for floodplain function restoration. The State has created a Local Land Use Planning Handbook that helps local agencies understand their requirements. But the State has not funded actions to revise General Plans. It is ultimately local agency's responsibility to update/amend their own General Plans. The State's role in assisting local agencies with this responsibility could be helping develop necessary technical information.
21. Local flood management jurisdictions should promote the preservation of existing floodplains and restoration of natural floodplain functions where feasible and carefully analyze the interface between natural and naturalized floodplains and structural flood management systems, to ensure that erosion and debris deposition from these natural areas do not create undue hazards to downstream facilities and property.	Ongoing. (Recommend discussion)	Land Use - Link funding to BMPs (current # 21 and 22 in 2013 RMS)	Bring forward to Flood Caucus for discussion to determine if recommendation is still warranted or should be revised.
Disaster Preparedness, Response, and Recovery Recommendations			
22. The Department of Water Resources should work closely with the Governor’s Office of Emergency Services and California Department of Health Services to ensure a consistent approach to disaster preparedness plans and procedures.	Not completed (Recommend discussion)	Flood Readiness - Conduct Flood Exercises (current #13 and 14 in 2013 RMS)	Bring forward to Flood Caucus for discussion. The California Emergency Management Agency (Cal EMA) was established as part of the Governor’s Office on January 1, 2009 – which merged the former Governor’s Office of Emergency Services with the Governor’s Office of Homeland Security.
23. The Department of Water Resources should take the lead in developing guidance and recommending improved, organized approaches for post-flood recovery, at the state, regional, and local levels. Creation of a statewide California Recovery Authority should be considered.	Not completed (Recommend discussion)	This would align to: Flood Readiness - Conduct Flood Exercises (current #13 and 15 in 2013 RMS)	Bring forward to Flood Caucus for discussion to determine if recommendation is still warranted or should be revised.